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(12) ABSTRACT OF INVENTION

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- (54) METHOD OF GEOPHYSICAL STUDIES OF HOLES OF COMPLEX CONFIGURATION BASED ON USAGE OF DIRECTED WIDE-BAND ELECTROMAGNETIC PULSES EXCITED BY CYLINDRICAL SLOT ARRAY

(57) Abstract:

FIELD: geophysics. SUBSTANCE: proposed method is meant for determination of electric and geometric parameters of zones close to holes in holes of complex configuration. In accordance with method probe in the form of cylindrical slot array is excited by wide-band electromagnetic pulses with duration in the order of 10⁻⁹ s. Component of magnetic field is measured by receiving antenna and measurement results are compared with results of mathematical modeling. Electric and geometric parameters of inhomogeneities of space close to hole are determined on basis of minimization of

vector of closure error. EFFECT: enhanced authenticity of method. 2 dwg

